

PATENTAtty Docket No.: 10005208-1
App. Scr. No.: 09/891,325**REMARKS**

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

Claims 1 and 7-11 have been amended. Claim 12 has been added. Therefore, claims 1-12 are currently pending in the present application, of which claims 1 and 8 are independent.

Claims 1, 2, 4, 5, and 7 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Baer et al. (U.S. Patent Number 3,611,321).

Claims 3, 6, and 8-11 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Baer et al. in view of Early (U.S. Patent Number 6,094,335).

The above rejections are respectfully traversed for at least the reasons set forth below.

Claim Rejection Under 35 U.S.C. §102(b)

The test for determining if a reference anticipates a claim, for purposes of a rejection under 35 U.S.C. § 102, is whether the reference discloses all the elements of the claimed combination, or the mechanical equivalents thereof functioning in substantially the same way to produce substantially the same results. As noted by the Court of Appeals for the Federal Circuit in *Lindemann Maschinenfabrik GmbH v. American Hoist and Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984), in evaluating the sufficiency of an anticipation rejection under 35 U.S.C. § 102, the Court stated:

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.

PATENTAtty Docket No.: 10005208-1
App. Ser. No.: 09/891,325

Therefore, if the cited reference does not disclose each and every element of the claimed invention, then the cited reference fails to anticipate the claimed invention and, thus, the claimed invention is distinguishable over the cited reference.

Claims 1, 2, 4, 5, and 7

Claims 1, 2, 4, 5, and 7 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Baer et al. However, U.S. Patent Number 5,757,077 to Chung was cited. It is assumed that the Office Action intended to cite to U.S. Patent Number 3,611,321 to Baer et al. As pointed out in the Office Action Baer et al. shows in FIGs. 2 and 3 a capacitor that is formed by two conducting plates 34-1 and 38-2 9 with extending conducting pillars 40 and 43, respectively, and dielectric layers 36-3, 36-4, and 36-5. However, Baer et al. clearly states that the dielectric layers 36-3, 36-4, and 36-5 are merely levels of the same dielectric material 36 (See Baer et al., col. 5, ll. 55-72). Thus, these three layers have the same dielectric constant. In contrast, amended claim 1 recites a first dielectric layer and a second dielectric layer of different materials, wherein "the second dielectric layer is of a second material having a second dielectric constant smaller than the first dielectric constant of the first material of the first dielectric layer."

Because Baer et al. fails to disclose each and every element arranged as stated in claim 1, it is respectfully submitted that claim 1 and its dependent claims 2-12 are allowable over the references of record. Accordingly, withdrawal of the rejection of claims 1, 2, 4, 5, and 7 are respectfully requested.

PATENT

Atty Docket No.: 10005208-1
App. Ser. No.: 09/891,325New Claim 12

Claim 12 has been added to further recite that the second electrode is not only deposited on the first dielectric layer but also on the second dielectric layer. It is respectfully submitted that Baer et al. and the other references of record neither anticipate nor make obvious such an arrangement for an electrode and multiple dielectric layers (of different materials) of an on-chip capacitor. Accordingly, it is respectfully submitted that claim 12 is further allowable over the references of record.

Claim Rejection Under 35 U.S.C. §103(a)

The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. §103 is set forth in MPEP §706.02(j):

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. In re Vacck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

As set forth in MPEP §2141.01, before establishing a *prima facie* case of obviousness with the cited references, "it must be known whether a patent or publication [that is used as a cited reference] is in the prior art under 35 U.S.C. § 102." Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1568 (Fed. Cir. 1987). Thus, if a reference is not qualified as prior art under 35 U.S.C. § 102, it is not qualified as prior art under 35 U.S.C. § 103.

PATENT

Atty Docket No.: 10005208-1
App. Ser. No.: 09/891,325

Claims 3, 6, and 8-11 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Baer et al. in view of Early (U.S. Patent Number 6,094,335).

Although the Office Action cited to Early to allege this rejection, the Office Action continued to refer to Johnson et al. (U.S. Patent Number 6,689,644), which as cited in a previous Office Action, in the rejection. It is assumed that the Office Action intended to actually refer to Early instead of Johnson et al. because the latter cannot be considered prior art as reasoned in a previous Response to Office Action.

It is respectfully submitted that, for at least the reasons set forth earlier, claims 3, 6, and 9-11 are not anticipated by Baer et al. In addition, the Office Action does not rely upon Early et al. to make up for the deficiencies in Kraft et al. with respect to claims 3, 6, and 9-11. Accordingly, as respectfully submitted above, claims 3, 6, and 9-11 are allowable over the references of record.

Claim 8

The Office Action attempted to make up for the deficiencies in Baer et al. by alleging that Early teaches that the substantially thin dielectric layer comprises a composite of materials that includes PZT and platinum. However, Early provides no such teaching. Indeed, Early does not discuss the use of PZT and platinum at all. Claim 8 has been rewritten as an independent claim that includes features set forth in base claim 1 and intervening claim 7, without any new issue or new matter added. Accordingly, it is respectfully submitted that claim 8, as previously presented, is further allowable over the references of record.

PATENTAtty Docket No.: 10005208-1
App. Ser. No.: 09/891,325**Conclusion**

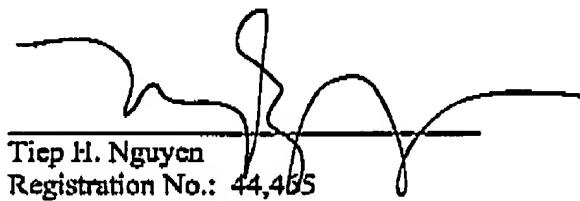
In light of the foregoing, withdrawal of the rejections of record and allowance of this application are earnestly solicited.

Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below. Please grant any required extensions of time and charge any fees due in connection with this request to deposit account no. 08-2025.

Respectfully submitted,

Dated: June 19, 2006

By



Tiep H. Nguyen
Registration No.: 44,485

Ashok K. Mannava
Registration No.: 45,301

MANNAVA & KANG, P.C.
8221 Old Courthouse Road
Suite 104
Vienna, VA 22182
(703) 652-3822
(703) 865-5150 (facsimile)